IN THE CLAIMS:

1. (original) A satellite communication system comprising:

m primary satellites, each equipped to project *N/m* beams onto an area, to collectively create *N* beam spots to cover the area, *m* being an integer greater than 1; and

n back up satellites, each equipped to project *N/m* beams onto the area, to enable each of the *n* back up satellites to be able to replace any one of the m primary satellites on demand, n being an integer equal to or greater than 1.

2. (currently amended) The satellite communication system of claim 1, wherein:

said *m* primary satellites are equipped to project *N/m* beams onto and across an area in a loosely-packed array manner, with sub-areas covered by a beam spot separated from other sub-areas covered by another beam spot by one beam width, and each equipped to facilitate communication [[over]] <u>on</u> 1 of *m* band of frequencies ~~on one beam~~; and

said *n* back up satellites are also equipped to project *N/m* beams onto and across the area in a loosely-packed array manner, with each sub-area covered by a beam spot separated from another sub-area covered by another beam spot by one beam width, and each equipped to facilitate communication [[over]] <u>on</u> 1 of *m* band of frequencies ~~on one beam~~.

3. (original) The satellite communication system of claim 1, wherein *m* equals 3.

4. (original) The satellite communication system of claim 1, wherein *n* equals 1.

5. (original) The satellite communication system of claim 1, wherein the area comprises a plurality of zones, each having a peak demand at a different time period.

6. (original) The satellite communication system of claim 1, wherein the satellite communication system facilitates data access by user terminals.

7. (original) A satellite communication system comprising:

m primary satellites, each equipped to project *N/m* beams onto and across an area in a loosely-packed array manner to collectively create *N* beam spots to cover the area, with each sub-area covered by a beam spot separated from another sub-area covered by another beam spot by one beam width, *m* being an integer greater than 1; and

n back up satellites, each also equipped to project *N/m* beams onto and across the area in a loosely-packed array manner, with each sub-area covered by a beam spot separated from another sub-area covered by another beam spot by one beam width, to enable a selected one of the *n* back up satellites to replace any one of the *m* primary satellites on demand, *n* being an integer equal to or greater than 1.

8. (original) The satellite communication system of claim 7, wherein *m* equals 3.

9. (original) The satellite communication system of claim 7, wherein *n* equals 1.

10. (original) The satellite communication system of claim 7, wherein the area comprises a plurality of zones, each having a peak demand at a different time period.

11. (original) The satellite communication system of claim 7, wherein the satellite communication system facilitate Internet access by user terminals.

12. (currently amended) A satellite communication system comprising:

m primary multi-beam satellites, each equipped to facilitate communication [[over]] on 1 of m bands of frequencies ~~on one beam~~, m being an integer greater than 1; and

n back up multi-beam satellites, each equipped to facilitate communication [[over]] on 1 of m bands of frequencies ~~on one beam~~, n being an integer equal to or greater than 1.

13. (original) The satellite communication system of claim 12, wherein m equals 3.

14. (original) The satellite communication system of claim 12, wherein n equals 1.

15. (original) The satellite communication system of claim 12, wherein the satellite communication system facilitates access by user terminals to a communications network.

16. (original) The satellite communication system of claim 15, wherein the communications network comprises the Internet.

17. (original) The satellite communication system of claim 15, wherein the communications network comprises an enterprise Intranet.

18. (original) A satellite communication system comprising:

m primary satellites, each equipped to project *N/m* beams onto an area, *m* being an integer greater than 1; and

n back up satellites, each equipped to project *N/m* beams onto the area, to enable a selected one of the *n* back up satellites to replace any one of the *m* primary satellites on demand, *n* being an integer equal to or greater than 1.

19. (original) The satellite communication system of claim 18, wherein *m* equals 3.

20. (original) The satellite communication system of claim 18, wherein *n* equals 1.

21. (original) The satellite communication system of claim 18, wherein the area comprises a plurality of zones, each having a peak demand at a different time period.

22. (original) A satellite comprising:

at least one transponder; and

an antenna system having a reflector and *N/m* feed horns, coupled to the transponder, to project *N/m* beams onto an area in a loosely-packed array manner, to contribute to covering *N/m* sub-areas of the area with $m - 1$ other satellites, with each sub-area covered by a beam spot separated from another sub-area covered by another beam spot by one beam width.

23. (original) The satellite communication system of claim 22, wherein the area comprises a plurality of zones, each having a peak demand at a different time period.

24. (currently amended) A method comprising:

configuring <u>each of</u> *m* primary satellites to project *N/m* beams onto and across an area in a loosely-packed array manner to collectively create *N* beam spots to cover the area, with each sub-area covered by a beam spot separated from another sub-area covered by another beam spot by one beam width, *m* being an integer greater than 1; and

configuring each of the *m* primary satellites to facilitate communication [[over]] <u>on</u> 1 of *m* band of frequencies ~~on one beam~~.

25. (currently amended) The method of claim 24, wherein the method further comprises

configuring on demand a selected one of n back up satellites to project *N/m* beams onto and across the area in a loosely-packed array manner, with each sub-area covered by a beam spot separated from another sub-area covered by another beam spot by one beam width, to replace one of the *m* primary satellites with the selected one of the *n* back up satellites, *n* being equal to or greater than 1; and

configuring the selected one of the n back up satellites to facilitate communication [[over]] on 1 of m band of frequencies ~~on one beam~~, the 1 of m band of frequencies being the 1 of m band of frequencies previously employed by the replaced primary satellite, n being an integer equal to or greater than 1.

26. (currently amended) A method comprising:

configuring each of *m* primary multi-beam satellites to facilitate communication [[over]] on 1 of m band of frequencies ~~on each beam~~, *m* being greater than 1; and

configuring a selected one of *n* back up multi-beam satellites to facilitate communication [[over]] on 1 of *m* band of frequencies ~~on each beam~~, the 1 of *m* band of frequencies being the 1 of *m* band of frequencies previously employed by the replaced primary multi-beam satellite, n being an integer equal to or greater than 1.

27. (currently amended) A method comprising:

configuring each of *m* primary satellites to project *N/m* beams onto and across an area; and

configuring on demand a selected one of *n* back up satellites to project *N/m* beams onto and across the area coincidence with one of the *m* primary satellites is configured to project its *N/m* beams onto and across an area, to replace the one primary satellite with the selected one of the *n* back up satellites, *n* being equal to or greater than 1.

28. (original) A gateway for communicating signals through a satellite communication system comprising:

means for transferring signals through *m* primary satellites, each equipped to project *N/m* beams onto an area, *m* being an integer greater than 1; and

means for transferring signals through *n* back up satellites, each equipped to project *N/m* beams onto the area, to enable a selected one of the *n* back up satellites to replace any one of the m primary satellites on demand, n being an integer equal to or greater than 1.

29. (original) A user terminal for communicating signals through a satellite communication system to at least one gateway comprising:

means for transferring signals through *m* primary satellites, each equipped to project *N/m* beams onto an area, *m* being an integer greater than 1; and

means for transferring signals through *n* back up satellites, each equipped to project *N/m* beams onto the area, to enable a selected one of the *n* back up satellites to replace any one of the m primary satellites on demand, n being an integer equal to or greater than 1.

30. (original) Apparatus for use in a satellite communication system comprising:

means for configuring *m* primary multi-beam satellites to project *N/m* beams onto an area to collectively create *N* beam spots to cover the area, with *m* being an integer greater than 1; and

means for configuring a selected one of *n* back up multi-beam satellites to project *N/m* beams onto the area, to replace one primary satellite with the selected one of the *n* back up satellites, *n* being equal to or greater than 1.